

INSTITUTE OF BUSINESS ADMINISTRATION (IBA)
Center for Computer Studies

Course Outline

Course Number:		Instructor:	Noman Aftab
Course Name:	Requirements Engineering	Website:	http://www.invaterra.com/idok8
Term:	Spring 2010	E-mail:	nomanaftab@yahoo.com
Credit Hours:	3	Class Meetings:	TF 11:30am-12:45pm TF 01:00pm-02:15pm
Lab Hours:	0	Office Hours:	Only by appointment

Course Overview

Students will learn to gather correct, concise, clear and complete set of requirements. Some of the topics included in this course are requirements engineering process, requirements elicitation and analysis, requirements validation and requirements management. Moreover, advance topics such as Model Based Verification and Formal Specification techniques will also be discussed in class. Students will apply the acquired knowledge to document requirements for a software application.

Required Text

- Gerald Kotonya and Ian Sommerville, "Requirements Engineering: Processes and Techniques", John Wiley & Sons, 1995.
- Handouts

Course Schedule

Session	Topics covered	Assignment(s)/ Deliverable(s)
1	Introduction to Requirements Engineering	
2	Introduction to Requirements Engineering	
3	Requirements Engineering Process	Reading Assignment #1
4	Requirements Engineering Process	
5	Requirements Engineering Process	
6	Requirements Elicitation and Analysis	Assignment #1 Due
7	Requirements Elicitation and Analysis	Reading Assignment #1
8	Requirements Elicitation and Analysis	
9	Methods For Requirements Engineering: Structured Approach	
10	Methods For Requirements Engineering: Structured Approach	Assignment #2 Due
11	Examples	
12	Examples	Assignment #3
13	Methods For Requirements Engineering: OO Approach	
14	Methods For Requirements Engineering: OO Approach	
15	Methods For Requirements Engineering: OO Approach	Assignment #3 Due
16		
17		
18		Lab Assignment #4
19		
20		
21		Assignment #4 Due
22		Lab Assignment #5
23	Non-Functional Requirements	
24	Non-Functional Requirements	

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25	Requirements Validation	Assignment #5 Due
26	Requirements Validation	
27	Requirements Validation	
28	Initiate Term Project	Term Project
29	Term Project: Requirements Elicitation	
30	Requirements Management	
31	Term Project: Requirements Review	Requirements Specification Due
32	Term Project: Requirements Review	
33	Requirements Management	
34	Requirements Management	
35	Term Project: Requirements Analysis Review	Requirements Analysis Due
36	Term Project: Requirements Analysis Review	
37	Viewpoint-oriented Requirements Methods	
38	Viewpoint-oriented Requirements Methods	
39	Term Project: Requirements Analysis Final Review	Final revision of Requirements Analysis Due
40	Case Study	
41	Case Study	
42	Term Project Presentations	Term Project Due
43	Term Project Presentations	Term Project Due
	Final Exams Start	

Assignments/Term Project(s)

There will be few reading assignments given to students throughout the semester. Each article in the assignment will be summarized by individuals and submitted to the instructor. Additional assignments will be given to get familiar with the theory/tools used in this course.

Students are also required to propose a topic for their research paper. Research topic must be finalized according to the date specified in the schedule.

Term project will be a group project. Students will be required to plan their effort and produce a complete software requirements specification. Additional requirements for the project will be communicated to the students later this semester.

Grading Policy

Head	Marks
Assignments/Case Study	10
Quizzes	10
idok8 CMS	5
Term Project	10
Term Paper	5
Hourlies (2 best)	30
Final	30
Total	100

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Class Policy

Students are expected:

- To be in class on time.
- To read the assigned material before coming to class in order to participate in discussions.
- To complete and submit their assignments, term paper and term project on time.

Plagiarism will not be tolerated.